FIELD MODIFICATION FORM
FOR
LOWER PASSAIC RIVER RESTORATION PROJECT
MALCOLM PIRNIE, INC.

DATE: October 15, 2009

DOCUMENT: Oversight Quality Assurance Project Plan (QAPP) for Biological Sampling, Community Surveys, and Toxicity and Bioaccumulation Testing
Lower Passaic River Restoration Project

ACTIVITY: QAPP Field Modification No. 2 for the Oversight Program

REQUESTED MODIFICATION:

According to the Lower Passaic River Restoration Project "Oversight Quality Assurance Project Plan (QAPP) for Biological Sampling, Community Surveys, and Toxicity and Bioaccumulation Testing" (Malcolm Pirnie, Inc., August 2009 and associated addenda), real-time modifications to the oversight project can be implemented by documenting the modification and obtaining approval from the Project Manager and Site Quality Officer (refer to Worksheet #6). Requested modifications for "Field Modification No. 2" include a series of updates to the Oversight QAPP so that the oversight program is consistent with the final versions of the Cooperating Parties Group (CPG) planning documents that were approved by the United States Environmental Protection Agency (USEPA)[1,2]. These modifications amend the following worksheets in the manner described below. Worksheets will be updated in the next version of the Oversight QAPP.

- Worksheet #2: This worksheet is amended to include the dates that the CPG planning documents were approved by the USEPA. The CPG QAPP for the fish sampling program was approved by the USEPA on August 7, 2009. The CPG QAPP for the benthic sampling program was approved by the USEPA on October 8, 2009. Oversight staff has reviewed these approved planning documents, Standard Operating Procedures (SOPs), and sampling maps.
- Worksheet #9: This worksheet is amended to include oversight scoping meetings with the USEPA and United States Army Corps of Engineers (USACE) on the benthic sampling program. A conference call was held on October 1, 2009 with the CPG to discuss the revised draft benthic QAPP and response to comments. Additional recommendations and consultation were provided via electronic-mail on September 14, 2009 (review of the revised SOP for the *Hyalella* toxicity testing), on September 24, 2009 (recommendations for disposal of investigative-derived waste), and on September 28, 2009 (recommendations on the CPG revised draft benthic QAPP).

[1] Windward Environmental LLC, 2009. "Quality Assurance Project Plan: Fish and Decapod Crustacean Tissue Collection for Chemical Analysis and Fish Community Survey." Lower Passaic River Restoration Project. Prepared for the Lower Passaic River CPG. August 7, 2009.
[2] Windward Environmental LLC, 2009. "Quality Assurance Project Plan: Surface Sediment Chemical Analyses and Benthic Invertebrate Toxicity and Bioaccumulation Testing." Lower Passaic River Restoration Project. Prepared for the Lower Passaic River CPG. October 8, 2009.

- Worksheet #10: This worksheet is amended to acknowledge that the CPG field crew conducted (gross visual) histopathology examinations of fish species at the field facility in East Rutherford, New Jersey between August 10, 2009 and September 19, 2009. When oversight activities were occurring in the facility, observations were made of these examinations. Field notes and photographs from the examinations were included in the weekly status reports to the USEPA and USACE.
- Worksheets #10 and #11: This worksheet is amended to note that the *in-situ* bioaccumulation testing has been postponed by the CPG. Consequently, oversight activities during October 2009 will not include the collection of tissue split samples of the *in-situ* bioaccumulation tests. For the laboratory bioaccumulation testing, tissue split samples will only be collected from the following two target benthic species: *Lumbriculus variegates* and *Neanthes virens*.
- Worksheets #11 and #18: These worksheets are amended to reflect a request from the USEPA that the 10 split samples for toxicity tests will be co-located with the 10 split samples for sediment chemistry.
- Worksheet #17: Attached are modified oversight forms for the benthic field sampling program. Based on the October 1, 2009 conference call with the CPG, the benthic field program will occur simultaneously on the river and in the facility in East Rutherford, New Jersey. Consequently, two oversight forms are required to address in-river and facility oversight activities. In-river oversight activities will include documenting field observations of sample collection. Oversight at the facility will include observing the processing for community survey samples and sediment chemistry samples. Observations will also include the packaging of sediment to support the laboratory toxicity tests and bioaccumulation tests by the CPG. Split samples will be collected by the CPG field crew and transferred to the oversight staff for sediment chemistry and toxicity testing.
- Worksheet #19: This worksheet is amended to clarify that prior to the generation of the tissue split sample, the parent tissue sample in custody of the CPG will be subject to preservation requirements and holding times as described in the CPG planning documents. Preservation and holding times for the split samples become effective once the split sample is generated and transferred to the government.
- Worksheet #23, Footnote 2: This footnote is amended to clarify that the government-assigned laboratory will follow their own laboratory SOPs to perform toxicity testing but will modify them according to the CPG laboratory SOP to ensure comparability on test conditions. One of these modifications will include using a parent *Hyalella* culture that has already been acclimated to 10 parts per thousand (ppt) salinity by the CPG to generate successive daughter individuals that will be exposed in the toxicity tests.

Worksheets #12, #18, and #20 reference the number of anticipated split samples that will be collected during the Oversight program. For clarification, split samples will be collected from approximately 10 percent of the total number of CPG samples as stated on Worksheet #11. Consequently, the total number of split samples collected and shipped is dependent on the number of CPG samples collected. The performance criteria for "completeness" (on Worksheet 12) of greater than 90 percent collection and greater than 90 percent laboratory analysis will need to recognize and account for the fact that the total number of split samples is dependent on the CPG sample collection.

RATIONALE:
Field modifications to update the Oversight QAPP (dated August 6, 2009) to be consistent with the final version of the CPG planning documents.

ATTACHMENTS:
Attachment 1: Revised Oversight Forms

Leonard J. Warner
Project Manager: _____

Jim McCann
Site Quality Control Officer: _____

CPG Sampling Location ID	River Mile	Date of Sampling	Time	Sampling Equipment Used
Sample Description				Corrective Action (if required)
CPG Sampling Location ID	River Mile	Date of Sampling	Time	Sampling Equipment Used
Sample Description				Corrective Action (if required)
Date	Print Oversight Staff Person Name			Signature of Oversight Staff Person

CPG Sample Location ID	CPG Sample ID	River Mile	Date of Sampling

Comments on Benthic Community Survey	Corrective Action (if required)

Comments on Sediment Sample Management	Corrective Action (if required)

Was split sample collected?	Malcolm Pirnie, Inc. Split Sample ID Number (if applicable)
□ Yes □ No	

Date	Print Oversight Staff Person Name	Signature of Oversight Staff Person

CPG Sample Designation:	**Government Split Sample Designation:**
Sample split collected by CPG Technician (name):	**Sample Collection Date:** _____ Time: _____ **Sample Processing Date:** _____ Time: _____
Split sample transferred to Oversight Staff (name):	**Split Sample Collection Date:** _____ Time: _____
Type of split sample collected: ☐ Sediment ☐ Surface Water ☐ Biota	**Sample depth (if applicable):** **Sample Location:**

Samples analyzed for (list all that apply):

☐ Metals	☐ PCDD/F Congeners	☐ Tox. Chironomid
☐ Total Mercury	☐ PCB Congeners	☐ Tox. Ampelisca
☐ Methylmercury	☐ Pesticides	☐ Tox. Hyallela
☐ PAH	☐ Inorganic Arsenic	☐ Percent Lipid
☐ SVOC	☐ TOC	☐ Percent Moisture

Split Sample labels contain the following:	**Split sample homogenized?**
☐ Site Name ☐ Sample Number ☐ Sample Type (matrix) ☐ Date of collection ☐ Time of Collection ☐ Sampler Names ☐ Analysis Requested ☐ Other:	☐ Not observed ☐ Yes ☐ No (comment): **Transfer Chain of Custody competed?** ☐ Yes ☐ No (comment):
Proper container(s) used and certified clean? ☐ Yes ☐ No (comment): **Samples packed for shipping:** ☐ Yes ☐ No (comment): **Temperature blank in cooler?** ☐ Yes ☐ No (comment):	**Samples preserved:** ☐ Yes ☐ No (comment): **Custody seals on containers?** ☐ Yes ☐ No (comment):

Government Split Sample Designation: **Additional observations/comments (if necessary):**	
Oversight Staff Name (printed):	**Agency:**
Oversight Staff Signature:	**Date:**